

Translation

PATENT COOPERATION TREATY

PCT/EP2003/008417



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P1860 wo	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/008417	International filing date (<i>day/month/year</i>) 30 July 2003 (30.07.2003)	Priority date (<i>day/month/year</i>) 16 August 2002 (16.08.2002)
International Patent Classification (IPC) or national classification and IPC C03B 33/037		
Applicant SCHOTT AG		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>1</u> sheets.</p>	
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>	

Date of submission of the demand 17 February 2004 (17.02.2004)	Date of completion of this report 07 December 2004 (07.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/008417

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-11, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 2-7, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1, filed with the letter of 03 July 2004 (03.07.2004)
- ☒ the drawings:
 pages 1/2-2/2, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/08417

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following document:

D2: US-A-3756104

Claims 1 to 7 - Inventive step

1. The present application does not meet the requirements of PCT Article 33(1) since the subject matter of **claim 1** does not involve an inventive step within the meaning of PCT Article 33(3).

1.1 D2, which is considered the closest prior art, discloses a method of cutting a continuous glass sheet (see figure 1), a cutting tool being moved over the width of the glass sheet, at an angle to the advance direction, at a cutting force predetermined by a control system, forming a score line (column 4, lines 38 and 39). The cutting force is predetermined by the control system (column 2, lines 10 to 14). It is implicit that the mechanical break advances along the glass sheet.

1.2 The subject matter of claim 1 differs from this method in that the cutting force is adapted to the thickness of the glass. This feature serves to bring about controlled breakage.

However, a person skilled in the art is aware that the thickness of a glass sheet can be irregular, e.g. at the edges (see, for example, D2, column 1, lines 40 to 42, and column 3, lines 66 to 68, "edge bulbs").

A person skilled in the art is also very familiar with the fact that the cutting force should be adapted to the thickness of the glass in order to obtain a clean cut.

By means of the method as per D2, the cutting force can be adapted as desired, in particular when the thickness of the glass sheet is irregular (see column 2, lines 6 to 8).

Therefore the prior art contains immediate suggestions for a person skilled in the art to use the D2 method with a cutting force dependent on the thickness of the glass. Thus he would arrive at a method as per claim 1 without thereby being inventive.

2. Dependent claims 2 to 7 do not contain any features which, combined with the features of any claim to which they refer, meet the PCT inventive step requirements (PCT Article 33(1) and (3)). The reasons for this are as follows:
 - 2.1 D2 discloses the detecting of the cutting tool position (column 4, lines 39 to 41), and the cutting force is clearly controlled as a function of the cutting tool position. Therefore the subject matter of **claim 2** is not inventive.

2.2 The additional feature of **claim 3** is disclosed in D2 (column 3, lines 34 to 36).

2.3 The additional features in **claims 4 and 5** (initial measurement of the thickness distribution and continuous measurement of the thickness) are obvious possibilities which a person skilled in the art would select according to the circumstances in order to detect the thickness of the glass sheet in the region of the cutting line.

2.4 D2 (figure 1) discloses a method as per **claim 6**. As concerns **claim 7**, a person skilled in the art is generally aware that a heat source can be exchanged with the cutting wheel known from D2 if necessary.

Claims 1 to 7 - Industrial applicability

3. **Claims 1 to 7** meet the requirements of PCT Article 33(4) since the cut sheet glass can be used for producing glass windows, for example.